

1. An aluminum alloy product having improved fatigue failure resistance, said alloy comprising about, by weight, 7.6 to about 8.4% zinc, about 2.0 to about 2.6% copper, about 1.8 to about 2.3% magnesium, about 0.088 to about 0.25% zirconium, about 0.01 to about 0.09 % iron, and about 0.01 to about 0.06 % silicon, the balance substantially aluminum and incidental elements and impurities.

2. The alloy product of claim 1 consisting essentially of about, by weight, 7.6 to about 8.4% Zn, about 2.0 to about 2.6% Cu, about 1.8 to about 2.3% Mg, about 0.088 to about 0.25% Zr, about 0.01 to about 0.09% Fe, and about 0.01 to about 0.06 % Si, the balance substantially aluminum and incidental elements and impurities.

3. The alloy product of claim 1 consisting of about, by weight, 7.6 to about 8.4% Zn, about 2.0 to about 2.6% Cu, about 1.8 to about 2.3 % Mg, about 0.088 to about 0.25% Zr, about 0.01 to about 0.09% Fe, and about 0.01 to about 0.06 % Si, the balance substantially aluminum and incidental elements and impurities.

4. The alloy product of claim 1 wherein said product is a plate, sheet, extrusion, forging or casting.

5. An alloy product suitable for aerospace applications having improved fatigue failure resistance, said alloy comprising about, by weight, 7.6 to about 8.4% zinc, about 2.0 to about 2.6% copper, about 1.8 to about 2.3% magnesium, about 0.088 to about 0.25.% Zr., about 0.01 to about 0.09 .% Fe, and about 0.01 to about 0.06 w% Si the balance substantially aluminum and incidental elements and impurities.

6. The alloy product of claim 5 wherein said product is a plate, sheet, extrusion, forging or casting.

7. The structural member of claim 4 which is plate suitable for use as an upper wing member.

8. The alloy product of claim 1 which has been solution heat treated and then artificially aged.

9. An alloy extrusion having a cross-section including a thickness less than about 3 inches wherein said alloy comprises about, by weight, 7.6 to about 8.4% zinc, about 2.0 to about 2.6% copper, about 1.8 to about 2.3% magnesium, about 0.088 to about 0.25.% Zr., about 0.01 to about 0.09 .% Fe, and about 0.01 to about 0.06 w% Si the balance substantially aluminum and incidental elements and impurities.

10. A product according to claim 1 having improved fatigue failure resistance relative to a 7055 product of similar size, shape, thickness and temper.